

CALIFORNIA
SUSTAINABLE WINEGROWING
ALLIANCE

SUSTAINABLE WINEGROWING & WINEMAKING

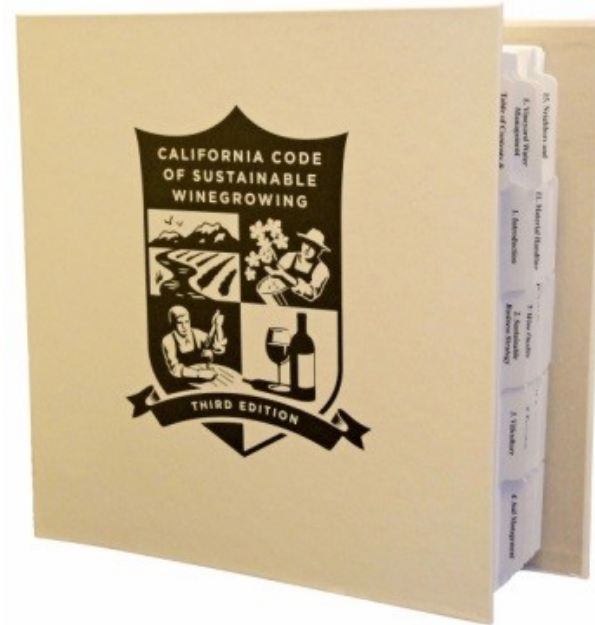
Sustainable Water Resources – April 10, 2018

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Vice President, Environmental Affairs, Wine Institute*



THE CODE WORKBOOK

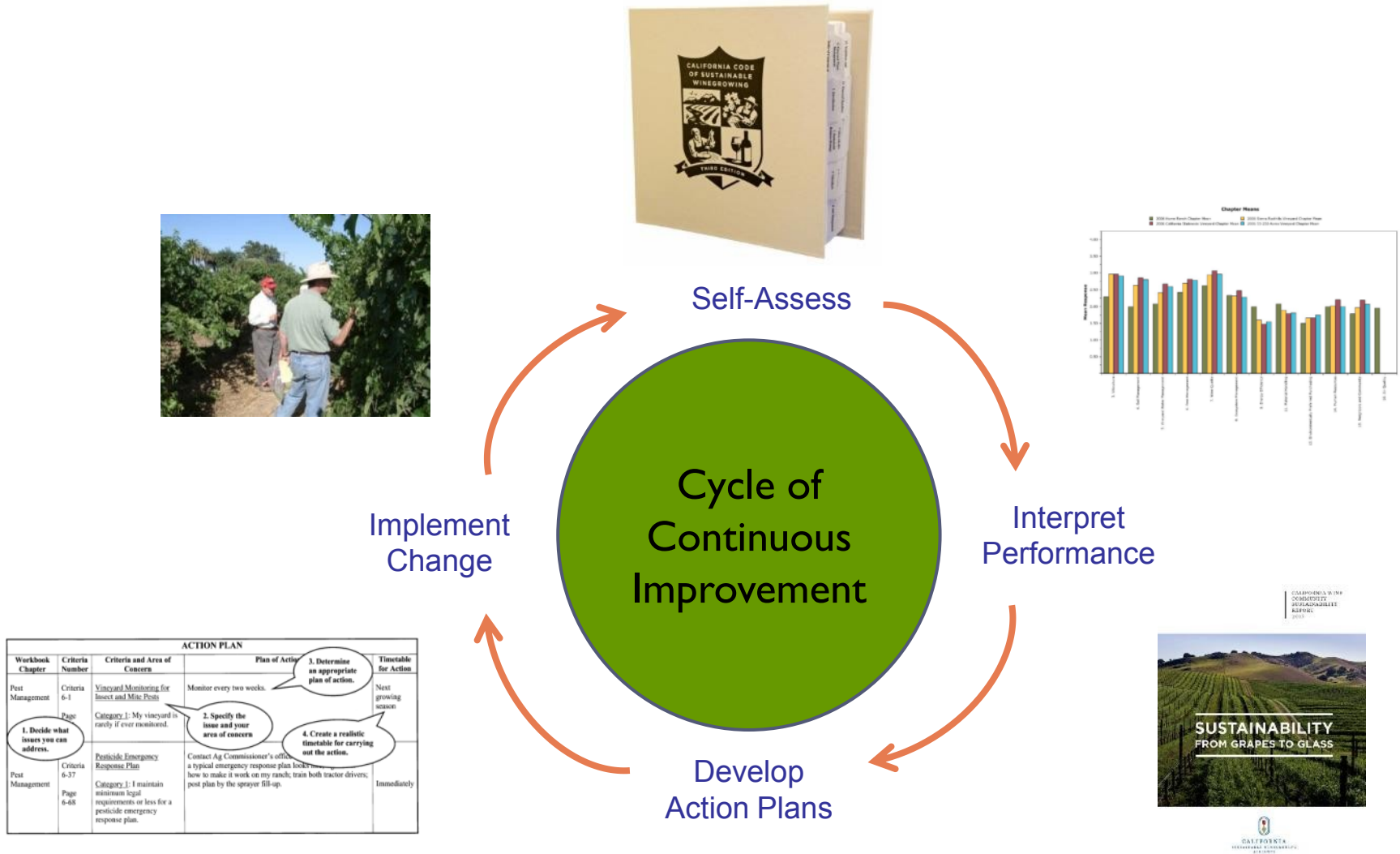
15 Chapters covering 140
Vineyard & 104 Winery Best
Practices



- | Sustainable Business Strategy
- | Viticulture
- | Soil Management
- | Vineyard Water Management
- | Pest Management
- | Wine Quality
- | Ecosystem Management
- | Energy Efficiency
- | Winery Water Conservation & Quality
- | Material Handling
- | Solid Waste Reduction & Management
- | Environmentally Preferred Purchasing
- | Human Resources
- | Neighbors & Communities
- | Air Quality

Download PDF workbook from CSWA website: www.sustainablewinegrowing.org

CYCLE OF CONTINUOUS IMPROVEMENT



TOOLS & RESOURCES

Ch 2 Ch 3 Ch 4 Ch 5 Ch 6 Ch 7 Ch 8 Ch 9 Ch 11 Ch 13 Ch 14 Ch 15 Ch 16

4. Soil Management > 4.8. Preserving or Increasing Organic Matter

Previous/Save Next/Save

My Assessment

Criteria	Category 4	Category 3	Category 2	Category 1	N/A
4.8. Preserving or Increasing Organic Matter	Soil analysis was done within the past 3 years for organic matter, and inputs and outputs were monitored and recorded. <i>And</i> Practices were implemented to increase nutrient cycling (e.g., composting, cover cropping, use of suitable treated water from ponds, etc.) as part of standard procedures. <i>And</i> Practices were implemented to prevent the off-site loss of nutrients including the use of buffer strips, and vegetation along roads and ditches. <i>And</i> Tillage was eliminated to lower the rate of organic matter breakdown.	Soil analysis was done for organic matter, and inputs and outputs were monitored. <i>And</i> Practices were implemented to increase nutrient cycling (e.g., composting, cover cropping, use of suitable treated water from ponds, etc.) as part of standard procedures. <i>And</i> Tillage was reduced or eliminated to lower the rate of organic matter breakdown.	Soil analysis was not done for organic matter, but there was an awareness of inputs and outputs during the winter to encourage nutrient cycling.	Soil analysis was not done for organic matter and our operation did not monitor nutrient inputs and outputs in an effort to develop nutrient budgets.	
Your Assessment					
Previous Assessment 2014					

Online Assessment System (highlights benefits)



Economic Tools

- Vineyard Sustainable Water Management Tool
- Winery Water Efficiency & Hot Spots Tool
- Winery Water Budgeting Tool
- Certification

Resources:

- Importance & How to Conduct a Distribution Uniformity Test
- Creek Restoration Video
- New Ways to Save Water

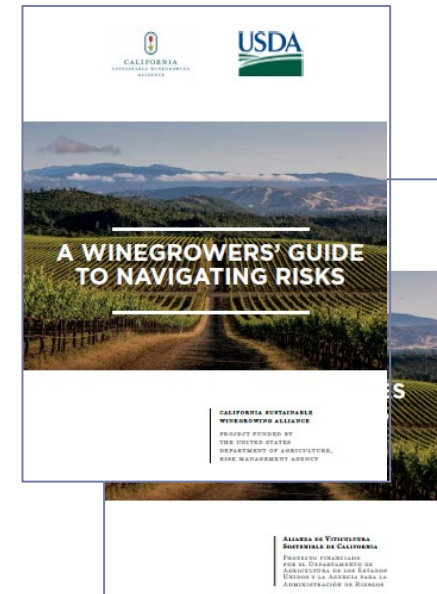
Cost-Benefit Calculators & Other Resources



In-Depth Guide & Shorter Handbook



Sustainability Metrics: Measure to Manage



Risk Guide in English & Spanish

CERTIFIED SUSTAINABLE

A third-party accredited auditor annually verifies that a vineyard or winery:

- | Adopts sustainable practices based on Code
- | Meets certification requirements including:
 - Meets prerequisite practices
 - Meets minimum score threshold
 - Measures & records performance metrics
 - Complies with crop protection material restrictions



New wine logo:
made in a
certified
winery with
85%+ certified
& 100% CA



CERTIFIED VINEYARDS



WATER EFFICIENCY

100%

developed comprehensive water management plans to optimize water use efficiency.

96%

measured their water use using flow meters or other methods such as calculation based on duration.

88%

used drip irrigation systems to deliver the optimum amount of water to each vine.



PEST MANAGEMENT

100%

monitored for pests as part of an Integrated Pest Management program to prevent and manage pests responsibly.

100%

explored low risk alternatives before applying pesticides and established buffer zones to protect sensitive areas.

86%

used cultural practices, such as cover crops and leaf removal, to naturally manage pests and reduce the need for pesticides.



HEALTHY SOILS

100%

allowed vegetation to grow in the vineyard, used cover crops and/or composted to improve soil health and structure.

90%

used plant tissue analysis results to help make nutrient application decisions.

66%

reduced or eliminated tillage to lower the rate of organic matter breakdown and improve soil structure.



ENERGY EFFICIENCY

88%

reduced energy use through water pump improvements, which targeted the largest energy saving opportunity in the vineyard.

67%

conducted an energy audit of the vineyard irrigation pump within the last five years.

56%

tracked the fuel used and utilized practices and technologies to increase fuel efficiency.



QUESTIONS?

www.sustainablewinegrowing.org

www.wineinstitute.org

www.discovercaliforniawines.org